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**To:** Provosts and Chief Academic Officers

**CC:** Mathematics Chairs/Leads

**From:** Dr. Ricardo Moena Faculty/Lead, Ohio Transfer Module Mathematics, Statistics, and Logic Review Panel/ Subgroup 2 of the Ohio Mathematics Initiative Chairs/Leads Network

**Date:** December 3, 2021

**Subject:** Announcement of Learning Outcomes for Ohio Transfer 36 TMM026 (Introductory Data Science)

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### Background

The Ohio Transfer 36, Subgroup 2, Mathematics, Statistics, and Logic have been tasked with exploring the possibility of an Introductory Data Science course. The proposed course (TMM026) is intended for students to think critically, reason, and communicate the meaning in data. The goal of this course is not to transform each student into a data scientist, but to give students a sense of data literacy.

The proposed Introductory Data Science (TMM026) learning outcomes are based on college level statistics. TMM026 serves the following purposes:

- Serve as a course incorporating the ability to collect, analyze, and derive meaningful information from data.
- Act as a course integrating curation of data, enhanced data visualization, statistical modeling, estimation, and prediction, application of data science, and consumption of data science practices.

In September 2021 an endorsement survey request was distributed statewide to gain endorsement for the proposed criteria of the new Mathematics, Statistics, and Logic Ohio Transfer 36 course. Upon concluding the statewide endorsement survey, feedback was reviewed by the panel to address concerns expressed by some institutions, the following were taken into consideration:

- **As a reminder, essential outcomes marked with an asterisk (\*), must be met. The Introductory Data Science Ohio Transfer 36 course outlines 24 learning outcomes with 20 deemed as essential. Those marked as essential must be met, however, institutions will have the flexibility, if they choose, to incorporate the remaining 4 non-essential learning outcomes (those not marked with an asterisk) or additional institutional specific learning outcomes to support students' needs within an equivalent course.**

- **To assist with institutional interest in ethics as it relates to Introductory Data Science, learning outcomes within section five, Consumer of Data Science have been deemed essential.**
- **To assist institutions with course design or redesign several textbooks and supporting materials have been identified by the Introductory Data Science writing panel. This is not an exhaustive list but rather a starting point to assist institutions.**
- **To better support institutions, members from the Introductory Data Science writing panel will hold a professional development session in Spring 2022. Session details will be forthcoming following the new year.**

The results of the statewide endorsement survey indicated strong support for the creation of courses in the area of Introductory Data Science. As a result, this Ohio Transfer 36 course has been added to the Mathematics, Statistics, and Logic Ohio Transfer 36, effective immediately. This announcement will assist your institution with course development or refining your existing course(s) to better align with transfer guarantees. Institutions will need to submit related course(s) for panel review prior to approval.

Thank you for sharing this memo and attachments with the appropriate Mathematics faculty and administrators at your institution.

If you or your Ohio Transfer 36 coordinator have any questions, please contact the faculty lead for the Ohio Transfer 36 Mathematics, Statistics, and Logic Review Panel/Subgroup 2, Dr. Ricardo Moena at [ricardo.moena@uc.edu](mailto:ricardo.moena@uc.edu) or (513) 556-4055 or Jessi Spencer, Director of Articulation and Transfer Policy, Budget, and Constituent Relations at [jspencer@highered.ohio.gov](mailto:jspencer@highered.ohio.gov) or (614) 728-4706.

Attachments (2)